COOLPIX P6000 Microscope Adapter

User's Manual

Microscopic documentation with the Nikon CoolPixP6000 and a microscope adapter"NY-P6000." Please refer to this manual for installation and camera settings.

Parts

Main Unit
Built-in
Relay lens.

Conversion Ring
Fits with eyepieceφ30mm.

C-mount adapter
Connect to C-mount

Installing adapter

＊First, remove lens ring as shown at right.
(Rotate counterclockwise)

＊ Screw camera into adapter to install.

★ Installation to microscope on next page

■ **φ30mm conversion ring,**
Insert adapter all the way down the ring.
It should fit just right.

■ **C-mount adapter,**
First, screw C-mount adapter into microscope's C-mount.
Second, insert main unit (with φ30mm conversion ring) into C-mount adapter and secure with screw on the side.

Installing to Microscope

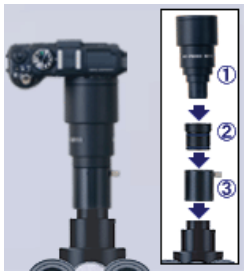
Installing to Eyepiece

Insert adapter to eyepiece tube. (remove eyepiece first).

If tube's inside diameter is φ30mm, first install conversion ring to main unit, then slide it into eyepiece. If tube's inside diameter is φ23.2mm, insert main unit directly. * Adapter would start rotate when diopter adjusting ring is attached to eyepiece. In such case, please insert the adapter after turning diopter adjusting ring to either end.

Nikon F phototube

Insert only main unit to Nikon F phototube. Recent Nikon trinocular microscopes are usually equipped with V-T phototube or F-phototube. In old model, Optiphot, Biophot, SMZ-2T trinocular are applicable. If microscope is equipped with 35mm camera or Polaroid system, it is usually same as old model. ※SMZ-10 require optional sleeve. ※ Adapter would start to rotate when diopter adjusting ring is attached to eyepiece. In such case, please insert the adapter after turning diopter adjusting ring to either end.



C-mount

C-mount is usually for installing CCD camera which has become trendy nowadays. C-mount has male screw of outer diameter 25.4mm. First, install C-mount adapter into microscope's C-mount. Second, insert main unit (with φ30mm conversion ring) into C-mount adapter and secure with screw on the side.

*only direct (1.0x) C-mount is compatible. C-mount with lens inside should not be used.

Olympus PT phototube

PT phototube has outer diameter of φ38mm with curving thread at the top. U-SPT, SZ-PT phototubes are these standards. When 35mm camera or Polaroid system are already installed, it is usually PT phototube. It requires fixation sleeve [NY-BH (option)] to secure adapter to microscope

JIS phototube

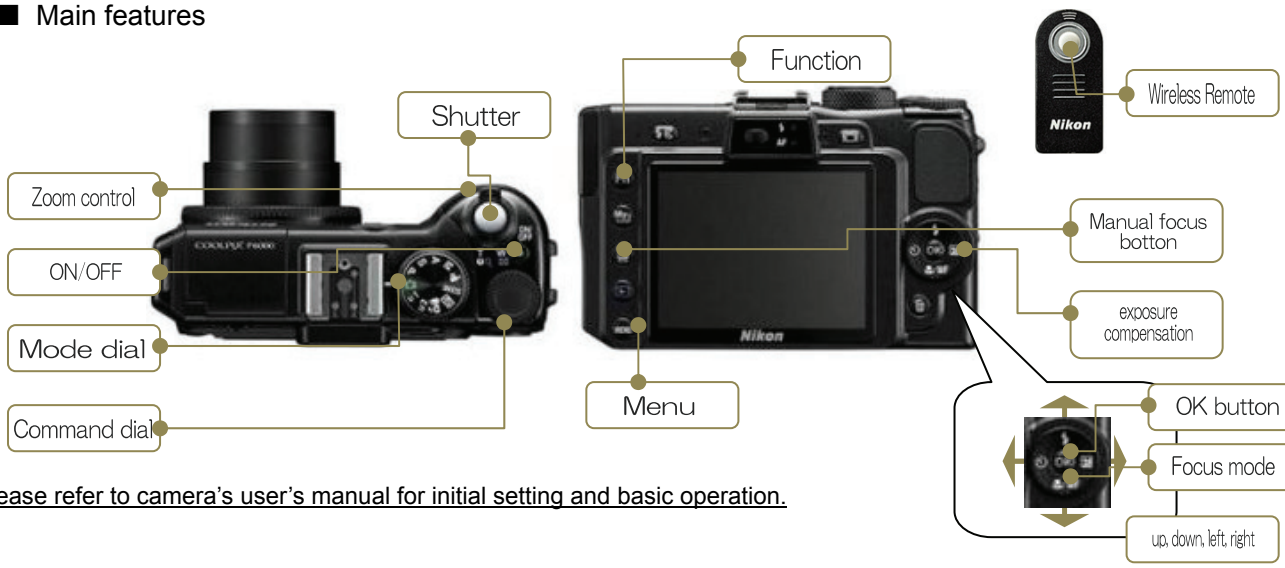
JIS standard of outer diameter φ25mm, and inner diameter Φ23.2mm. Old models of Olympus microscope usually employed this standard. It requires fixation sleeve [NY-JIS (option)] to secure adapter to microscope

*Able to connect without NY-JIS, however the image may come out blurry.

Camera Setting

• • • Camera setting for capturing quality image.

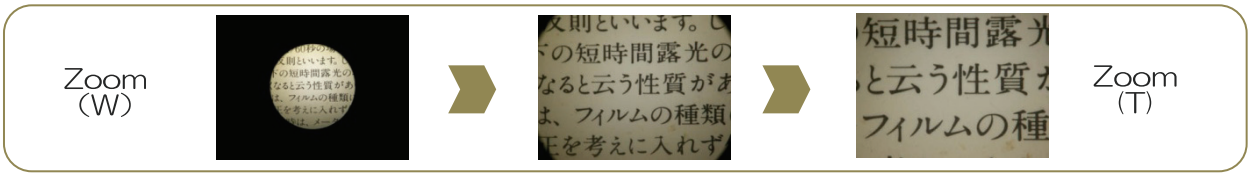
■ Main features



※ Please refer to camera's user's manual for initial setting and basic operation.

○ Easy setting • • • This is easy semi-auto mode.

- Rotate the MODE DIAL to SCENE.
- Holding down the FUNCTION BUTTON and rotate command dial to LANDSCAPE, Select and press OK.
- Rotate Zoom control to T(right). Zoom up until there will be no vignette.



- Try focus using focus handle of microscope while watching camera's LCD viewer.

There is difference in focus level between the image captured by microscope eyepiece and the image captured by a digital camera. Please make sure to focus using focus handle of microscope while watching camera's LCD viewer.

- Press shutter release (or remote shutter) to capture the image.
- ▷ Press the Play button. The last picture shot will be displayed in full-frame playback mode.
- Press ±/− EXPOSURE COMPENSATION to alter exposure. Press the multi select ▲ or ▼ to adjust exposure.

○ Manual Setting • • If you are unsatisfied with quality of image captured by easy setting, please try manual setting.

- Rotate the MODE DIAL to M (manual)
- Press FOCUS MODE to display focus menu. Use the multi selector to choose [MF], and press OK.
- Focus to ∞ (INFINITE) while pressing MF BUTTON and rotating command dial to the left.

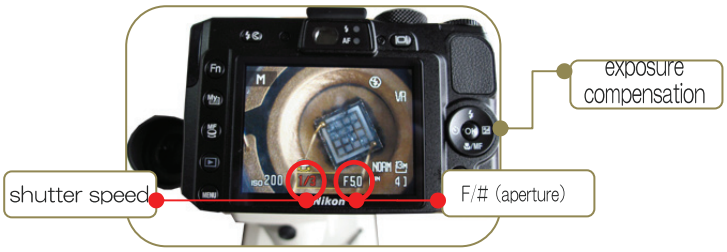
• Rotate Zoom control to T(right). Zoom up until there will be no vignette.

• Rotate COMMAND DIAL while pressing FUNCTION BUTTON to set ISO sensitivity.

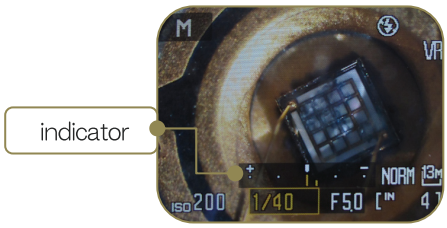
＊ISO sensitivity equals to camera's basic sensitivity. Higher the value, more you will be able to capture images even in darkness. However, when ISO is set higher than 800, noise starts to appear, therefore please set low level as long as there is no shortage of light.

• Press EXPOSURE COMPENSATION, and select F/number (aperture) for setting.

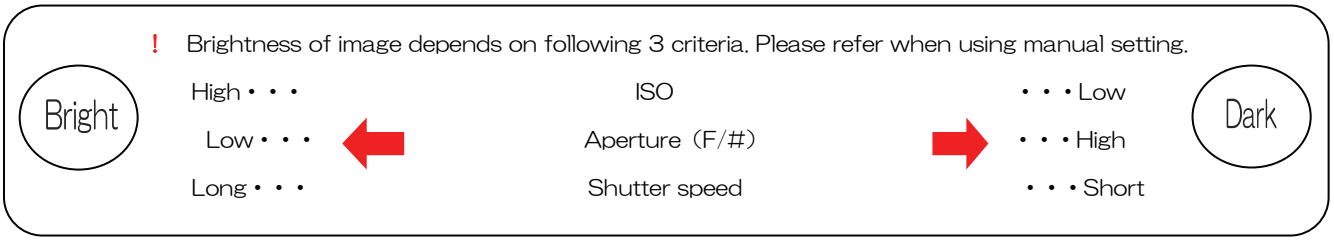
• When F/number (aperture) is set at its lowest level, press EXPOSURE COMPENSATION once again, and select SHUTTER SPEED for setting.



• When SHUTTER SPEED value becomes red, start to rotate COMMAND DIAL until EXPOSURE INDICATOR comes to center (±0)



• Take a picture for test. If image is too bright on the preview, try shortening the shutter speed（-）, if it is too dark try lengthening the shutter speed（+）.



• When you have wireless remote control (ML-L3), press SELF-TIMER, and select REMOTE CONTROL, and press OK

• Using wireless remote or shutter release, start taking picture once setting is done

• ▷ Press the Play button. The last picture shot will be displayed in full-frame playback mode.

• Register the setting in mode dial U1 or U2. Once registered, you can shoot with the same setting by just switching to this mode. Press MENU BUTTON. Use the multi selector to choose SAVE USER SETTING and press OK.

Other setting • • • Please refer to User's Manual of P6000 .

• White Balance • • • Manually adjust white balance according to light source. Set it manually when you cannot reproduce color of subject precisely because of the light source. User's Manual P136

• Picture Control • • • Monochrome, Vivid, etc. This is setting for image color. User's Manual P129

• Image Size • • • You can choose the size(pixel count) for the picture recorded. Small image sizes are suitable for pictures that will be distributed by E-mail or used in web pages. Picture shot at large sizes requires more memory and are suitable for printing, but the number of shots that can be taken will be fewer. User's Manual P126

• Auto off • • • If no operations are performed for the selected length of time, the monitor will turn off and the camera will enter standby mode. When AC adapter is connected, 30miniute is selected automatically. User's Manual P126

• Date Imprint • • • Date and time of recording can be imprinted on pictures. User's Manual P165

■ Other thing you can do with Coolpix P6000

Connect to TV monitor

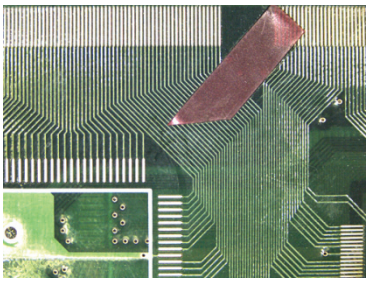
Using accessory video cable, P6000 can be connected to TV monitor and output real time images. It is easier to focus with large display.

Also observation with many people can be possible.

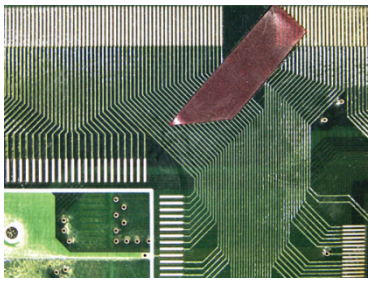
Auto Bracketing

It enables you to capture image with varied exposure in a single shot.

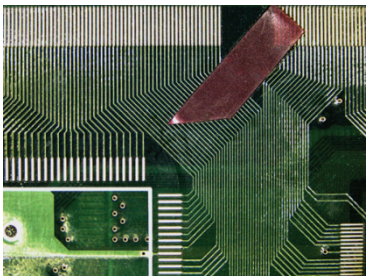
Use in situation in which it is difficult to guess the correct exposure.



+0.3



Base Pic



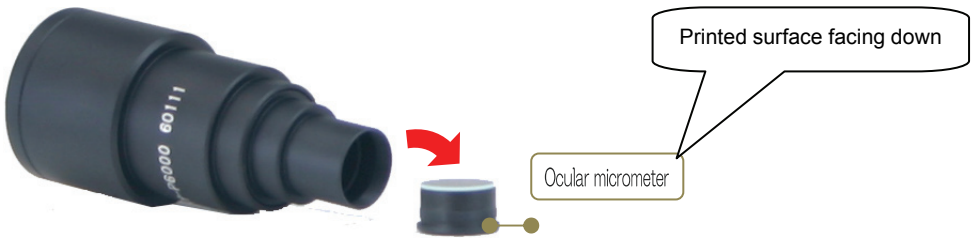
-0.3

Active D-lighting

It reduces over exposure and under exposure.

Installing ocular micrometer (sold separately)

Ocular micrometer of size φ21mm can be installed into NY-P6000. Turn the tip of adapter counter-clockwise to remove bracket for micrometer. Put micrometer on the bracket with printed surface facing down, then reinstall to adapter body.



Micrometer designed for digital camera adapter 【S11-CF】

(10mm/100split pitch 0.1mm)

This special micrometer for digital camera adapter omitted the numbers entirely and moved scale to the periphery for clearer view.